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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/591,615	06/09/2000	Laurent Six	TI-29030	2796

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EXAMINER

BATAILLE, PIERRE MICHE

ART UNIT	PAPER NUMBER
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2186

DATE MAILED: 02/26/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/591,615

Applicant(s)

SIX ET AL.

Examiner

Pierre-Michel Bataille

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-12 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In view of the arguments filed on December 31, 2003, PROSECUTION IS HEREBY REOPENED. A New Ground of Rejection set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 6, 8-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Moyer et al (US 5,375,216).

With respect to claim 8, Moyer teaches a digital system having a memory circuit that is shared by a plurality of requestor circuits (processor circuit and plurality of peripheral circuits), comprising the steps of: sharing access to the memory circuit between the plurality of requestor circuits when the digital system is in a first mode of operation [(in the supervisor mode of operation, access to data cache unit 24 and register file 32 is unrestricted) [Col. 10, Lines 49-51]; selecting a first portion of the memory circuit responsive to a size parameter stored in a register, such that a second portion of the memory circuit is not selected [(each control instruction having a predetermined size access to a predetermined register) [Col. 10, Lines 55-59; Col. 4, Line 61-63]; and limiting access to a first portion of the memory circuit to only a first requester of the plurality of requestors when the digital system is in a second mode of operation [(in user mode, access of data cache unit 24 is restricted to only a small portion of memory referred to as "user memory" and a limited number of registers in register file 32) [Col. 10, Lines 42-45].

With respect to claim 1, Moyer teaches a system and method operating a digital system having a memory circuit comprising a plurality of requestors (processor circuit and plurality of peripheral circuits); a scheduling circuit (sequencer 34) operable to sequentially schedule memory access to the memory circuit [Col. 9, Lines 30-48]; a selection circuit and access mode circuitry for: indicating shared access to the memory circuit between the plurality of requestors circuits when the digital system is in a first mode of operation and for selecting a portion of the memory responsive to a size parameter stored in a register (*register file 32*) [(each control instruction having a predetermined size access to a predetermined register) [Col. 10, Lines 55-59; Col. 4, Line 61-63] such that the second

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portion is not selected; and limiting access to the first portion of the memory circuit to only a first requestor in a second mode of operation [(in the supervisor mode of operation, access to data cache unit 24 and register file 32 is unrestricted) Col. 10, Lines 49-51; (in user mode, access of data cache unit 24 is restricted to only a small portion of memory referred to as "user memory" and a limited number of registers in register file 32) [Col. 10, Lines 42-45].

With respect to claims 2-4, 6 and 9-12, Moyer teaches, in user mode, access of data cache unit 24 is restricted to only a small portion of memory referred to as "user memory" and a limited number of registers in register file 32 such that the second portion is not selected in response to the access mode circuit [Col. 10, Lines 42-45] said second portion would inherently placed in low power mode as it is not being addressed and the location pertaining to the second portion is not activated; and in the supervisor mode of operation, access to data cache unit 24 and register file 32 is unrestricted, i.e. the entire memory circuit is operable for sequential access [Col. 10, Lines 49-51].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moyer et al (US 5,375,216) in view of US 6,138,010 (Rabe et al).

With respect to claim 7, Moyer discloses the digital system claimed but fails to specifically teach the digital system being a cellular telephone having the disclosed microprocessor, having the required components of claim 7. However, Rabe discloses a multimode communication device and method prioritizing the uses of shared communications system by a resource manager by selectively assigning shared resources in response to operations of a communication device according to a first mode and according to a second mode [Col. 5, Lines 1-4], wherein the communication device is a portable radiotelephone (claimed cellular telephone, Col. 3, Lines 40-41) having a microprocessor [(transceiver 124 & 126 or microcontroller or other processor for operating the portable communication device according to the first and second modes) Col. 3, Lines 60-65; Col. 4, Lines 7-12]], and wherein said portable multimode radio telephone comprises: a integrated keyboard (key pad) connected to the microprocessor via keyboard adapter (user interface 138, Fig. 1 & 302, Fig. 3) [Col. 4, Lines 35-41; Col. 7, Lines 22-35]; a display connected to the microprocessor via a display adapter (display connected to user interface 138, Fig. 1 & 302, Fig. 3) [Col. 7, Lines 22-35; Col. 4, Lines 35-41]; radio frequency (RF) circuitry (speaker or earpiece) connected to the microprocessor [Col. 4, Lines 35-41; Col. 7, Lines 22-35]; and an aerial (antenna 122, Fig. 1 for radio communication) connected to the RF circuitry [Col. 3, Line 66 to Col. 4, Line1].

Therefore, it would have been obvious to one having ordinary skill in art and having the teachings of Moyer and Rabe before him at the time of the invention, to substitute the microprocessor in the portable radiotelephone, as taught Rabe, since the result would have exploited the concept of shared resources in a multimode

communication device, as taught by Rabe [Col. 2, Lines 20-26]. Similarly, since Rabe teaches prioritizing shared communications resources by way of a resource manager by selectively assigning shared resources in response to operations of the communication device, it would have been readily apparent to one, having ordinary skill in the art, to include the microprocessor in a cellular telephone because Rabe's mobile radio telephone would have provided and coordinated priority control for accesses according to the first mode and the second mode [Col. 7, Lines 33-42].

Allowable Subject Matter

6. Claim 5 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Michel Bataille whose telephone number is (703) 305-0134. The examiner can normally be reached on Tue-Fri (7:30A to 6:00P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (703) 305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pierre-Michel Bataille
Primary Examiner
Art Unit 2186

February 19, 2004

PIERRE BATAILLE
PRIMARY EXAMINER